National Park Service
U.S. Department of the Interior

# CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA GEORGIA



**Chattahoochee River Environmental Education Center Sewer and Fiber Optic Connection Proposal** 

DRAFT ENVIRONMENTAL ASSESSMENT /ASSESSMENT OF EFFECT

October 2004

October 8, 2004

Dear Interested Party;

The enclosed Environmental Assessment (EA) evaluates effects of a proposal to install a sewer connection from the Chattahoochee River Environmental Education Center (CREEC) to the Fulton County sewer main located within Chattahoochee River National Recreation Area. The sewer is necessary because the septic system at the CREEC is outdated and is not in compliance with County regulations. In addition, a fiber optic line to the CREEC is proposed to facilitate communication between the CREEC and park headquarters.

Public comments on this document will be accepted during a 30-day period ending on November 8, 2004. Please send written comments to:

Superintendent
Chattahoochee River National Recreation Area
1978 Island Ford Parkway
Atlanta Georgia 30350-3400
Fax: (770)

E-mail: <u>CHAT Superintendent@nps.gov</u>

Comments must be received by 5:00 p.m. on November 8, 2004. A copy of the decision on this project will be distributed to those who provide comments on the EA and to those who specifically request to receive a copy.

Thank you for your interest in Chattahoochee River National Recreation Area.

Sincerely,

Kevin G. Cheri Superintendent

#### BACKGROUND AND NEED FOR THE PROPOSAL

## **Purpose and Need**

Chattahoochee River National Recreation Area (CRNRA) proposes two separate actions to allow increased use of the Chattahoochee River Environmental Education Center (CREEC). The CREEC is a popular site for school groups, teacher education and interpretation programs for the public. Park maintained facilities include the building, a large deck for outdoor meetings, a fire ring, fields for wildlife viewing and limited camping, a parking area and trails. The CREEC is part of the Jones Bridge Unit of the park (Figure 1). The park wants to expand use of the facility to accommodate larger gatherings.

The first action is to install a fiber optic line from the building to Barnwell Road. To facilitate connection with CRNRA Local Area Network and telephones for those working at the CREEC, CRNRA proposes to install a fiber optic data line along the entrance road.

The second action is to connect the building to the main sewer line approximately 900 feet from the building. During the last 5 years the septic system at the CREEC has overflowed several times. The septic system is out of date and is not sufficient to meet the current or proposed needs of the park. Several years ago the park obtained a permit from Fulton County to connect to the county sewer system. The park was required under the permit to retire the septic system and fill it in.

The problems with the septic system are not new. Planning was initiated over three years ago. Concerns over cost and coordination with the county over the permitting for the sewer connection slowed the planning process. In addition, emergency repairs lessened the urgency of replacing the septic system. No EA or other National Environmental Policy Act (NEPA) documentation was prepared at that time. Therefore, this EA represents a new NEPA process. The park has recently expanded its Resource Education Division and as a result has developed additional Resource Education programs centered on the CREEC. Implementation of these programs is now a priority for the park.

The National Park Service (NPS) proposes to provide a sewer connection from the Chattahoochee River Environmental Educational Center (CREEC) to the Fulton County sewer main and a fiber optic line in such a manner as would minimize impacts on natural and cultural resources.

## **Objectives**

The objectives of the proposed action are to:

- 1. Eliminate the need for the septic system and associated overflow and backup problems;
- 2. Increase connectivity between the CREEC and park headquarters for staff;
- 3. Support large event planning and implementation at the CREEC.

Direction for management actions regarding facilities management comes from the Chattahoochee River National Recreation Area General Management Plan and Environmental Impact Statement (NPS, 1989) and NPS Management Policies (2001).

The decision to be made in regard to this EA is to:

- not implement the project (No Action), or
- implement the Proposed Action as described in this document.

#### Issues and Concerns

The primary scoping process consisted of an interdisciplinary team (IDT) who defined the issues and alternatives to be examined in the EA. Additional specialists' reports and analysis documents are contained in the analysis file and are hereby incorporated by reference.

- **Issue 1:** Unsanitary conditions occur when septic system overflows or backs up.
- **Issue 2:** A permanent "fix" seems unlikely without connection to the sewer main.
- **Issue 3:** Damage to unknown archeological resources could occur
- **Issue 4:** Current facilities do not support large group activities.
- **Issue 5:** Lack of connection to CRNRA headquarters by NPS employees at the CREEC.
- **Issue 6:** Park neighbors may be disturbed by noise levels.
- **Issue 7:** Fulton County permit requires park to cease using septic system.

Table 1. Summary of Impact Topics.

Impact Topic	Retained or dismissed from further evaluation	Relevant Laws, Regulations or Policies
Soils	dismissed	Georgia Erosion and Sedimentation Act of 1975; Georgia Erosion and Sedimentation Act [amended 2000]; NPS Organic Act; NPS Management Policies

Air Quality	dismissed	Clean Air Act (CAA); CAA Amendments of 1990; NPS Organic Act; NPS <i>Management</i> <i>Policies</i> , Georgia State law
Water Resources	dismissed	Clean Water Act; Safe Drinking Water Act; Executive Order 12088; Fish and Wildlife Coordination Act; National Park Service Organic Act; Metropolitan Rivers Protection Act; Georgia Water Quality Control Act; NPS Management Policies 2001
Vegetation	dismissed	NPS Organic Act; NPS Management Policies; Executive Order 13112 of 1999 Invasive Species; NPS Director's Order 77-7, Integrated Pest Management
Floodplains and Wetlands	dismissed	Executive Order 11988; Executive Order 11990; Rivers and Harbors Act; Clean Water Act; NPS Organic Act; NPS <i>Management Policies</i> ; Metropolitan Rivers Protection Act, DO #77-1, <i>Wetland Protection</i>
Wildlife	dismissed	NPS Organic Act; Fish and Wildlife Coordination Act; Executive Order 13186, <i>Migratory Birds;</i> Migratory Bird Treaty Act; Metropolitan Rivers Protection Act; Georgia Water Quality Control Act; NPS <i>Management Policies</i>
Threatened, Endangered, or Sensitive Species	retained	Endangered Species Act; NPS Organic Act; Georgia endangered species and related wildlife statutes; Migratory Bird Treaty Act; Fish and Wildlife Coordination Act; Bald and Golden Eagles Protection Act; NPS Management Policies
Recreation resources	retained	Americans with Disabilities Act; NPS Organic Act; NPS <i>Management Policies</i>
Cultural Resources	retained	Section 106 of National Historic Preservation Act; Archeologic and Historic Preservation Act; Archeological Resources Protection Act; National Environmental Policy Act; Native American Graves and Repatriation Act; 36 CFR 800; Executive Order 13007; Executive Order 11593; the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation; Programmatic Memorandum of Agreement Among the NPS, Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers ((1995); NPS Management Policies; Director's Order 28, Cultural Resource Management Guideline; Director's Order 12, Conservation Planning, Environmental Impact Analysis, and Decision Making
Noise	retained	NPS Management Policies; Director's Order 47, Sound Preservation and Noise Management
Waste Management Prime and Unique Farmlands	dismissed dismissed	NPS Management Policies  Council on Environmental Quality 1980 memorandum on prime and unique farmlands

Table 2: Topics Dismissed

Impact Topic	Reason to dismiss from further analysis
Soils	None of the alternatives would result in loss of soils.  Mitigations would include silt fencing and seeding disturbed
	areas. Total area is 0.06 acres.
Air Quality	Use of one heavy machine will be for one week. This is not expected to affect air quality in the area.
Water Resources	No stream or temporary drainages are in the area. Mitigation to prevent movement of soils will also protect the river.
Vegetation	Surveys indicate that the proposed route is along trails or previously disturbed areas. Total area is 0.06 acres.
Floodplains and Wetlands	Surveys found no wetland indicator species. Total area is 0.06 acres.
Wildlife	Surveys indicate that the proposed route is along trails or previously disturbed areas. Total area is 0.06 acres.
Waste	Neither alternative would generate either hazardous material
Management	or solid wastes that need disposal in hazardous waste or general sanitary landfills.
Prime and Unique Farmlands	Neither alternative would cause loss of prime farmlands.

**Table 3: The Degree to Which Each Alternative Meets Objectives** 

Objective	Alterative One - No- Action	Alternative Two – Connect CREEC to Sewer Main
Eliminate the need for septic system and overflow and back up problems	This alternative would not eliminate need for the antiquated septic system or eliminate overflow or backups	This alternative would eliminate dependence on antiquated sewer system and overflow and backups by providing an up to code connection to the county sewer main
Increase connectivity between CREEC and park headquarters	This alternative would not support increased connectivity.	This alternative would support increased connectivity by providing high speed internet access to CHAT computer and access to phone system.

Support large event	This alternative would	This alternative would support
planning and	not support event	event planning by improving
implementation	planning or	communication between the
	implementation	CREEC and headquarters and
		implementation eliminating
		backup into the CREEC after
		every event with large numbers
		of visitors.

**Table 4: Comparison of Alternatives** 

Issue	Alternative One - No-Action	Alternative Two – Connect to Sewer and Fiber Optics
Unsanitary conditions occur when septic system overflows.	Overflows would continue	Overflows from septic system would be eliminated
A permanent "fix" needed	Would not be a permanent solution	Would be a long term solution
Archeological sites may be present.	Would not damage archeological sites	Archeological survey would indicate areas to avoid
Current restroom facilities do not support large group activities	Would not support large groups	Would support large groups
Lack of connection to CRNRA headquarters	Would not improve connection	Would provide connection to CRNRA Headquarters
Park neighbors are disturbed by noise levels	Would not alter noise patterns	Increased use could potentially disturb neighbors
Fulton County permit requires park to cease using septic system	Would not comply with permit	Would comply with permit

#### PROPOSED ACTION AND ALTERNATIVES

Two alternatives are fully analyzed in this EA: 1) No Action; and 2) connect CREEC to main sewer line and install fiber optic line. The site location is shown on maps in Appendix 1.

#### **Alternative 1: No Action**

Under this alternative, no actions would be taken to provide a connection to the main sewer line or to the CRNRA telephone and LAN. NPS staff at the CREEC would not have access to the CRNRA telephone system for routine park matters or emergencies. The septic system would continue to overflow and backup. Fulton County specified that a sewer line connecting to the Fulton County main was to be constructed. The septic system in its present form was condemned by Fulton County. Septic systems in Fulton County must have permits and the system at the CREEC is not permitted.

## Alternative 2: Connect CREEC to main sewer line and install fiber optic line

The proposed route for the fiber optic line would be along the unpaved entrance road. The line would be buried in a 12 inch deep by 4 inch wide ditch within the roadbed. This would minimize damage to the soils along side the road. A population of Georgia aster (*Aster georgianus*) occurs along side the road. Surveys for this species were done. Prior to the actual digging areas containing this species would be flagged so that no soil compaction or disturbance from vehicles or people would occur during ditching activities. If this population has new plants care would be taken to not disturb the area close to the plants by trampling or digging. Putting the line within the road prism and putting dirt only onto the road bed would mitigate the effects of installing the line. Care would be taken to avoid trampling in areas that would be flagged.

Heavy Equipment brought in along the entrance road for sewer construction would stay on the road to avoid damage to soils and plants on either side of the road. This would minimize potential damage to Georgia Aster and its habitat in the area.

The proposed route for the new sewer line (see Figure 3) would run from the end of the septic tank to a manhole in the field below the house. The proposed route would run along a gravel road most of the distance. The deepest part of the trench would be next to the man hole in the disturbed area of the county sewer easement.

The entire sewer line would be approximately 700 feet in length and run along current trails, road, and easement. There would be a temporary increase in the potential for erosion in the area of trenching as the soil would need to be piled to the side of the trench as work progresses. However mitigation would include use of erosion cloth along the route of the trench to halt the movement of soil downslope.

No large trees (over 20 inches dbh) would need to be removed along the length of the proposed route. Approximately three green ash trees may need to be removed at the man hole. The position of the main sewer line and manhole constrain the park in the placement of the sewer line.

Over the one week initial construction period, a front bucket loader would likely be used for these estimated hours. It is estimated that during 80% of the construction period, only one piece of heavy equipment would be operating at a particular time. Equipment would likely be operating for no more than eight hours each day. No equipment would be operated from six pm to seven am to minimize the impact of noise on park neighbors. All equipment would be maintained in good operating condition and checked daily to insure that engine fluids do not leak.

An archeological site was identified in the area near the manhole (Lawson 2004). The proposed path for the sewer line would be within the roadbed and as shown in Figure 3. The road disturbed surface deposits. An archeologist would be present during trenching near and within the archeological site. It is in this area that the trench would descend to three feet. The trench would be dug with the smallest width feasible in this section.

Throughout the length of the sewer line (see Figure 3), six inch or eight inch pipe would be placed in a graded trench. The trench would descend towards the manhole at a grade in compliance with Federal, State and Local building code requirements.

## General Design Features and Mitigations

- All construction activities would be in conformance with the Best Management Practices for maintaining water quality and minimizing erosion and soil compaction, following all Federal, State and Local laws.
- Contractor would stay on the road prism for all work associated with the fiber optic line. No soil or vehicles would go off the road prism.
- No vehicles or people would be allowed in areas flagged as noted above
- The fiber optic cable would be laid within the road prism.
- The contractor shall re-grade disturbed area and seed paths and field with a NPS-approved erosion control/wildlife mix, fertilized, and mulched with weed free mulch. Fertilizer, mulch and seed mix would be approved by NPS prior to application.
- Care would be taken to follow all local, County and State erosion control laws.
- The contractor would construct sewer line at a grade in compliance with Federal, State and Local building code requirements along NPS specified path (to be marked at site).
- The river and downhill areas would be protected with silt fencing according to Federal, State and Local Erosion Control laws or ordinances during construction to prevent silt from entering the Chattahoochee River.

- An archeologist must be present when digging approaches the sewer main (this area will be marked).
- The digging of the sewer line as it approaches the sewer main would be with the smallest backhoe feasible for the work with four arms to distribute weight.
- The ditch as it approaches the sewer main will be kept to the smallest diameter (12") possible for laying the pipe.
- The proposed route shown in Figure 3 must be followed especially near the archeological site;
- Any additional mitigation the Archeological Report on the CREEC Sewer Line Proposed Route lists or the archeologist on site suggests must be followed.
- Information regarding access through the proposed project area would be provided to the public through signs or maps.
- Construction activities generating noises above ambient levels would be timed to occur during the hours of 7 AM 6 PM, Monday through Saturday.

**Table 5: Summary Comparison of Alternatives and Impacts** 

Impact Topic	Alternative One - No- Action	Alternative Two – Connect CREEC to Sewer Main
Threatened, Endangered, and Sensitive Species	Direct and indirect impacts from overflows of the septic field would be localized, short-term, and negligible. Cumulative effects would be localized and negligible. These areas are close to the building and are disturbed by visitors. The determination of the National Park Service is that the no-action alternative would have no effect or may effect, but is unlikely to adversely effect threatened, endangered, or sensitive species. This alternative would not result in impairment of threatened, endangered, or sensitive species.	The adverse direct and indirect impacts of digging trenches in previously disturbed areas would be localized, short-term, and negligible. Cumulative effects would be localized and negligible since the area of disturbance is 0.06 acres, would be revegetated, and is already disturbed. The determination of the National Park Service is that the no-action alternative would have no effect or may effect, but is unlikely to adversely effect threatened, endangered, or sensitive species. This alternative would not result in impairment of threatened, endangered, or sensitive species.

Recreation resources	The adverse direct impacts of back ups and overflows from the outdated septic system would be localized, long-term, and minor. Cumulative effects would be localized, minor, and adverse. This alternative would not result in impairment of recreation resources.	The adverse direct impacts of installing a sewer system would be localized, short-term, and negligible. The beneficial effects of the sewer line would be long term, minor and localized Cumulative effects would be localized, minor, and beneficial. This alternative would not result in impairment of recreation resources.
Cultural Resources	No direct, indirect or cumulative effects on cultural resources would occur under this alternative. This alternative would not result in impairment of cultural resources.	Direct effects on archeological resources would be negligible to minor. With the assistance of an archeologist, no adverse affect on a site eligible for listing on the National Register would occur. Contribution of this proposed project as specified to cumulative effects on cultural resources would be negligible. This alternative would not result in impairment of cultural resources.
Noise	No direct, indirect or cumulative effect of noise is expected from this alternative	The adverse direct impacts of constructing the sewer line would be localized, short-term, and negligible. The indirect effects of increased use of the facility would be adverse long term and negligible. Cumulative effects of increased use of the facility to the general noise level of the area would be localized, minor, and adverse. This alternative would not result in impairment of ambient noise.

#### AFFECTED ENVIRONMENT AND ASSESSMENT OF EFFECTS

## **Methodology for Assessing Impacts**

Applicable and available information on known natural and cultural resources was compiled. Surveys for natural and archeological resources were conducted. Alternatives were evaluated for their effects on the resources and values determined during the scoping process. The impact analyses were based on professional judgment using information provided by park staff, relevant references and technical literature citations, and subject matter experts. For each impact topic, the analysis includes a brief description of the affected environment and an evaluation of effects. Potential impacts are described in terms of type (beneficial or adverse), context (site-specific, local, or even regional), duration (short-term or long-term), and intensity (negligible, minor, moderate, or major or impairment of Chattahoochee River NRA's resources and values).

When appropriate, mitigation measures have been identified that may be employed to offset or minimize potential adverse impacts.

Definitions of intensity levels varied by impact topic, but, for all impact topics, the following definitions were applied.

Beneficial: A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.

Adverse: A change that moves the resource away from a desired condition or detracts from its appearance or condition.

*Direct:* An effect that is caused by an action and occurs in the same time and place.

*Indirect:* An effect that is caused by an action but is later in time or farther removed in distance but is still reasonably foreseeable.

Short-term: An effect that within a short period of time would no longer be detectable as the resource is returned to its pre-disturbance condition or appearance. Short-term impacts, depending on impact topic, may range from a few hours up to five years (see table below).

Long-term: A change in a resource or its condition that does not return the resource to pre-disturbance condition or appearance and for all practical purposes is considered permanent.

## **Monitoring of Proposed Action**

Most compliance monitoring would be performed by the Project Inspector for the ensuing contract. Contract administrators would monitor the site as the work is performed to ensure that all contract stipulations are met. If a problem arises due to adverse environmental impacts that were not anticipated by the Interdisciplinary Team (IDT), the problem would be brought to the attention of the contracting officer's representative and the appropriate resource specialist. During the contract, the project site may also be periodically reviewed on the ground by resource specialists, and any necessary changes may be applied to correct resource problems.

#### **ENVIRONMENTAL IMPACTS**

NEPA and CEQ regulations direct agencies to "avoid useless bulk...and concentrate effort and attention on important issues" (40 CFR 1502.15). Certain impact topics that are sometimes addressed in NEPA documents for other kinds of proposed actions or projects have been judged not to be substantively affected by any of the proposed alternatives considered in this EA. These topics are listed in Table 1 and 2, and a rationale is provided for dismissing specific topics from further consideration. Only those elements that show a potential impact are discussed further in this EA.

Impacts to the following critical elements were considered, as well as impacts to other park resources. Only those elements that show a potential impact are discussed further in this EA.

Noise: discussed below

Cultural Resources: discussed below

Soils: no effect

Vegetation: no effect

Wildlife: no effect

Threatened and Endangered Species: discussed below

Water Resources: no effect

Floodplains: no effect

Hazardous/Solid Wastes: no effect

Recreation Resources: discussed below

## NOISE

## Affected Environment.

The Chattahoochee River Environmental Education Center is within the Jones Bridge Unit of CRNRA. It is located close to the busy intersection of Barnwell Road and Holcomb Bridge Road. Nearby houses are across the road or across fields, woods or a pond. The park holds large events at the CREEC regularly without complaints from park neighbors.

#### Alternative 1. No Action

The park would continue to hold large family events, teacher trainings, and other park sponsored special events. Large family special events usually end by 9 p.m. Evening owl walks are meant to be quiet so as not to disturb owls. Camping activities are strictly monitored by NPS personnel or group leaders. The adverse direct effects of the no action alternative would be localized, long-term, and negligible.

#### **Cumulative Effects**

Cumulative effects of events at the CREEC would be localized, long-term and negligible. Noise from the CREEC should not contribute to local ambient noise from traffic and mechanized equipment in the area.

This alternative would not result in impairment of ambient noise.

## Alternative 2. Connect CREEC to main sewer line and install fiber optic line

The park would continue to hold large family events, teacher trainings, and other park sponsored special events. Large family special events usually end by 9 p.m. Evening owl walks are meant to be quiet so as not to disturb owls. Noise from construction would have adverse, short term, localized and minor effects. Camping activities are strictly monitored by NPS personnel or group leaders. The adverse direct effects of would be localized, long-term, and negligible. No long term change in ambient noise from the no-action alternative is expected.

#### **Cumulative Effects**

Cumulative effects of events at the CREEC would be localized, long-term and negligible. Noise from the CREEC should not contribute to local ambient noise from traffic and mechanized equipment in the area.

This alternative would not result in impairment of ambient noise.

## THREATENED, ENDANGERED, AND SENSITIVE SPECIES

#### Affected Environment

A U.S. Fish and Wildlife Service website for Fulton County (<a href="http://athens.fws.gov/endangered/counties/fulton-county.html">http://athens.fws.gov/endangered/counties/fulton-county.html</a>) and the Georgia Natural Heritage records for Fulton County during September 2004 (<a href="http://georgiawildlife.dnr.state.ga.us/content/specieslocationbycounty.asp?lst-county=Fulton">http://georgiawildlife.dnr.state.ga.us/content/specieslocationbycounty.asp?lst-county=Fulton</a>) identify threatened, endangered and/or sensitive species which may exist in Fulton County. These data were used to assess effects on Threatened and Endangered species.

Table 6. Federal, and Georgia State endangered, threatened, Species of Management Concern (SOMC), or species of concern for Fulton County

Common Name	Scientific Name	Federal Status	State Status
Animals			
Bald eagle Gulf moccasinshell mussel	Haliaeetus eucocephalus Medionidus pencillatus	Threatened Endangered	Endangered Endangered
Shiny-rayed pocketbook mussel	Lampsilis subangulata	Endangered	Endangered
Bachman's Sparrow Bluestripe shiner Peregrine Falcon Highscale shiner Four-toed salamander	Aimophila aestivalis Cyprinella callitaenia Falco peregrinus Notropis hypsilepis Hemidactylium scutatum	SOMC SOMC None None None	Rare Threatened Endangered Threatened Special Concern
Webster's salamander	Plethodon websteri	None	Special Concern
Sculptured pigtoe Plants	Quincuncina infucata	None	Rare
Georgia aster Bay star-vine Piedmont barren strawberry	Aster georgianus Schisandra glabra Waldsteinia lobata	Candidate None None	Special concern Threatened Threatened
Pink lady slipper	Cypripedium acaule	None	Unusual
Yellow lady slipper	Cypredium calceolus	None	Unusual
Harper's Heartleaf	Hexastylis shuttleworthii var. harperi	None	Unusual
Ginseng	Panax quinquefolius	None	Special Concern
Mountain Witch Alder	Fotheragilla major	None	Special Concern
Southern Twayblade	Listera australis	None	Special Concern
Log Fern	Dryopteris celsa	None	Special Concern

Gulf moccasinshell and shiny-rayed pocketbook mussels occur in streams and have been influenced by sedimentation of their habitat. Sculptured pigtoe mussels occur in sand and limestone rock substrate of main channels of rivers and large streams with moderate current. There are no known populations of these mussels in the Chattahoochee River near the CREEC.

Bald eagles are considered water-dependent raptors typically found near estuaries, lakes, rivers, and oceans. Their distribution is strongly influenced by the availability of suitable nest and perch sites near large, open water bodies. As of 1999, there were 48 known nest sites in Georgia (http://www.gwf.org/protectedanimals.htm). Bald eagles may migrate to secure a sufficient food supply and the southern states provide important wintering and foraging areas for eagles from other regions. Data from *Bald Eagle (Southeastern) Recovery Plan USDI* Fish and Wildlife Service (1985) indicates that Chattahoochee River NRA has potential habitat for this species. Foraging bald eagles have been reported within CRNRA.

Bluestripe shiners are endemic to the Apalachicola River drainage in Florida, Alabama, and Georgia. They occur in the upper and middle Chattahoochee and middle Flint rivers, lowermost parts of their tributaries, and upper Apalachicola River. The shiners find habitat in the riffles and runs of large streams and rivers with rubble or sand substrates. They were formerly present at shoals which are now inundated by fifteen large impoundments (NatureServe 2003). These fish may be present on the park as the river has natural shoals.

Bachman's sparrow inhabits open woods with a grassy, shrubby understory where it is a ground nesting bird. It breeds and can also winter in Georgia and is a short distance migrant. This species prefers bunch grass, bluestem or wire grass under an open canopy of long leaf pine.

Peregrine falcons typically find habitat on high, inaccessible cliff ledges, but the species has adapted to new habitats provided by tall buildings and bridges. In Georgia, the bird's historical breeding range was limited to the extreme north, but falcons may be seen throughout Georgia on migration routes. Peregrine falcons forage upon pigeons, shorebirds, songbirds, and occasionally waterfowl. In 1992 a breeding pair of falcons established themselves in downtown Atlanta and has successfully produced young. Although it is possible that falcons use CRNRA as foraging habitat, no such observations have been reported.

Highscale shiners occur in the Chattahoochee River drainage and its biggest threat may be sedimentation. This shiner requires streams flowing over bedrock and sand substrates (NatureServe 2003). It prefers small to medium-sized creeks and small rivers often near stream mouths (NatureServe 2003). These fish may be present on the park as the river has natural shoals.

Four-toed salamander occurs in swamps, boggy streams and ponds, and wet woods (Pauley et al. 2000). This species, which is rare in Georgia, was not found during surveys of Chattahoochee River NRA but probably occurs within riparian areas within the park (Whit Gibbons 2004, Savannah River Ecology Laboratory and University of Georgia, personal communication).

Webster's salamander has an S1 rating for Georgia (NatureServe 2003) and occurs in moist forests near rocky streams. This species, which is rare in Georgia, probably

occurs within riparian areas within the park (Whit Gibbons 2004, Savannah River Ecology Laboratory and University of Georgia, personal communication).

Georgia aster is a relic species of post oak savanna/prairie communities that existed in the southeast prior to widespread fire suppression and extirpation of large native grazing animals. It can occupy a number of dry upland sites (U.S. Fish and Wildlife Service 2000). Georgia aster, a candidate for Federal listing, occurs along the entrance road at the CREEC. Inter-specific factors such as competition and genetic isolation may be factors in the decline since small populations do not compete well without management assistance.

Bay star-vine, a State listed species, can be found twining on the ground, subcanopy trees and shrubs in rich alluvial woods. The hardwood cove forest habitat and floodplain regions within the park contain suitable habitat. Park staff have found this species throughout riparian areas of the park. Surveys for the presence of this species have indicated that this species is not present in the area to be disturbed.

Pink lady slipper orchid is listed as unusual in Georgia due to the potential threat from collection and lack of periodic wildland fires. It is listed as apparently secure for Georgia. It is found in upland pine and mixed hardwood/pine forests with acidic soils (NatureServe 2003). It was not found in the proposed path of the sewer line or fiber optic line.

Harper's Heartleaf is listed as unusual and occurs on low terraces in floodplain forests. It is threatened by hardwood forest degradation, drainage and conversion of wetlands, and development (NatureServe 2004). It was not found in the proposed path of the sewer line or fiber optic line.

Mountain Witch Alder occurs in rocky (sandstone, granite) woods and bouldery stream margins. It is vulnerable to land-use conversion, habitat fragmentation, and forest management practices (NatureServe 2004). It was not found in the proposed path of the sewer line or fiber optic line.

American ginseng occurs in mesic hardwood forests and cove hardwood forests. Population sizes of this plant have decreased considerably since European settlement, primarily because of extensive digging of its roots for commercial sale. As for most forest understory plants, ginseng has also declined due to substantial cutting and clearing of its original forest habitats, and continues to be threatened to some extent by inappropriate forest management (NatureServe 2004). It was not found in the proposed path of the sewer line or fiber optic line.

Log Fern occurs in floodplain forests and lower slopes of rocky woods (NatureServe 2004). This species has a S2 listing for Georgia. It was not found in the proposed path of the sewer line or fiber optic line.

Southern twayblade occurs in poorly drained circum-neutral soils. Forest management practices (harvest, site prep, Rx fire) present a low-level threat to this species (NatureServe 2004). It was not found in the proposed path of the sewer line or fiber optic line.

**Methodology.** Information on the number of acres to be disturbed was used to estimate impacts. Other information was gathered from CRNRA documents and staff knowledge.

**Regulations and Policies.** Current laws and policies require that the following conditions be achieved in the park:

Desired Conditions – Federal-and state-listed threatened and endangered species and their habitats are sustained.

Source – Endangered Species Act; NPS Organic Act; NPS Management Policies (2001).

## **Impacts of Alternative 1: No Action**

*Impact Analysis:* With the no-action alternative, no change in land use is expected minimizing the potential disturbance of listed species and their habitats.

Gulf moccasinshell mussels and Shiny-rayed pocketbook mussels occur in streams and have been influenced by sedimentation of their habitat. The proposed project area does not include a stream or tributary of the Chattahoochee River. Therefore, it is the determination of the National Park Service that the no-action alternative is not likely to adversely effect Gulf moccasinshell mussels and Shiny-rayed pocketbook mussels or their habitat.

Since there are no known bald eagle wintering concentrations or nest sites within the project vicinity, no effects on this threatened species would be expected. Therefore, it is the determination of the National Park Service that the no-action alternative *is not likely to adversely effect* the bald eagle or its habitat.

Part of the Georgia Aster population near the CREEC was directly impacted and eliminated by previous road work. A part of the population of Georgia aster present along the access road is consistently mowed by unknown park neighbors despite park efforts. More Georgia aster plants could be reintroduced at this location. This is not planned at this time. It is the determination of the National Park Service that the no-action alternative *may effect, but is unlikely to adversely effect* the Georgia aster or its habitat.

The bluestripe shiner, high scale shiner, and sculptured pigtoe mussel are influenced by sedimentation. The no-action alternative does not change land use patterns or contribute to erosion. The National Park Service has determined that the no-action alternative would have *no effect* on the bluestripe shiner, highscale shiner and sculptured pigtoe.

Habitats preferred by Bachman's sparrow do not occur within CRNRA. No shift in land use is associated with the No- action alternative. Therefore no adverse impacts on this species should result from this alternative. It is the determination of the National Park Service that the no-action alternative would have *no effect* on the Bachman's sparrow or its habitat.

No shift in land use is associated with the No- action alternative. Negative effects on peregrine falcons under the no-action alternative would be non-existent or negligible. It is the determination of the National Park Service that the no-action alternative would have *no effect* on the peregrine falcon or its habitat.

The distributions of the four-toed salamander and Webster's salamander are patchy. Habitat in the park is believed suitable for the four-toed salamander and Webster's salamander. Neither has a protected legal status but both have been largely extirpated from Georgia due to habitat destruction. Under the no-action alternative effects would be localized, short-term, and negligible.

Harper's Heartleaf, Log Fern, Southern twayblade, Mountain Witch Alder, bay vine-star, Piedmont barren strawberry, and yellow lady slipper occur in moist habitats. American Ginseng and pink lady slipper occur in drier areas. No shift in land use is associated with the No- action alternative. It is the determination of the National Park Service that the no-action alternative *may effect, but is not likely to adversely effect*, Harper's Heartleaf, Log Fern, Southern twayblade, Mountain Witch Alder, Piedmont barren strawberry, bay vine-star, pink and yellow lady slipper or their habitats.

#### Cumulative Effects

This alternative would result in a negligible short term effect within the Chattahoochee River watershed. No change in land use would occur with this alternative. Cumulative impacts to Federal and Georgia state listed species from urbanization and changes in land use are major and negative. This alternative is likely not to contribute to the cumulative effects of habitat loss on these species.

This alternative would not result in impairment of threatened, endangered, or sensitive species.

## Impacts of Alternative 2: Connect CREEC to main sewer line and install fiber optic line

Impact Analysis: With the Connect CREEC to main sewer line and install fiber optic line alternative, no long term change in land use is expected minimizing the potential disturbance of listed species and their habitats. Trenching would temporarily disturb the ground within inches of the ditch for the fiber-optic line and within several feet of the sewer line. Both sewer and fiber optic line would be run along existing trails and roads to minimize disturbance. The area of disturbance for the sewer line is 0.06 acres (225m²)

Gulf moccasinshell mussels and shiny-rayed pocketbook mussels occur in streams and have been influenced by sedimentation of their habitat. The proposed project area does not include a stream or tributary of the Chattahoochee River. Mitigations to prevent erosion of soils and subsequent sedimentation of nearby water bodies would ensure that this alternative does not affect these species. Therefore, it is the determination of the National Park Service that Alternative Two *is not likely to adversely effect* Gulf moccasinshell mussels and shiny-rayed pocketbook mussels or their habitat.

Since there are no known bald eagle wintering concentrations or nest sites within the project vicinity, no effects on this threatened species would be expected. Construction noise generated by the work would not persist for more than one week. Therefore, it is the determination of the National Park Service that Alternative Two may effect, but is not likely to adversely effect the bald eagle or its habitat.

A population of Georgia aster is present along the access road. Although Georgia Aster re-introductions have occurred in many locations throughout the park; none are currently planned for this site. This is not planned at this time. The sewer line part of the proposed project involves short term construction and restoration of grass habitat with native species. The proposed path of the sewer line was surveyed for this species. Since most of the habitat is disturbed by trails and a road this species was not found. It is the determination of the National Park Service that Alternative Two *may effect, but is unlikely to adversely effect* the Georgia aster or its habitat.

The bluestripe shiner, high scale shiner, and sculptured pigtoe mussel are influenced by sedimentation, an indirect effect of allowing soils to erode into streams and rivers. Mitigation to prevent movement of soils downslope and into the Chattahoochee River would be required. The cumulative effects of sedimentation and resultant loss of habitat on these species has caused a decline in both these species. By employing mitigation to control erosion and resulting sedimentation, NPS would not contribute to the decline of these species. The National Park Service has determined that Alternative Two *is not likely to adversely effect* the bluestripe shiner, highscale shiner or sculptured pigtoe mussel.

Habitats preferred by Bachman's sparrow do not occur within CRNRA. No permanent shift in land use is associated with the Alternative Two. Therefore no adverse impacts on this species should result from this alternative. It is the determination of the National Park Service that Alternative Two would have *no effect* on the Bachman's sparrow or its habitat.

Given the small acreage (0.06 acres) that would be disturbed under this alternative, the effects of construction activities on peregrine falcons under this alternative would be non-existent or negligible. It is the determination of the National Park Service that Alternative Two would have *no effect* on the peregrine falcon or its habitat.

The distributions of the four-toed salamander and Webster's salamander are patchy. Habitat on the park is believed suitable for the four-toed salamander and Webster's salamander. Both have been largely extirpated from Georgia due to habitat destruction. The direct effects of constructing a sewer line along the easement could include the loss of some individuals. A maximum extent of 100 square feet of field would be temporarily disturbed. This project because of the trail and road leading to the sewer man hole would have a negative, highly localized, short-term, and negligible effect on these species.

Harper's Heartleaf, Log Fern, Southern twayblade, Mountain Witch Alder, bay vine-star, Piedmont barren strawberry, and yellow lady slipper occur in moist habitats. American Ginseng and pink lady slipper occur in drier areas. No permanent shift in land use is associated with Alternative Two. A recent survey of the area indicated that these species do not occur in the area to be disturbed by trenching. It is the determination of the National Park Service that Alternative Two *may effect, but is not likely to adversely effect*, Harper's Heartleaf, Log Fern, Southern twayblade, Mountain Witch Alder, Piedmont barren strawberry, bay vine-star, pink and yellow lady slipper or their habitats.

#### Cumulative Effects

This alternative would result in a one month effect on previously disturbed lands. The area is less than 0.06 acres. No long term change in land use would occur with this alternative. Cumulative impacts to Federal and Georgia state listed species from urbanization and changes in land use are major and negative. This alternative is likely not to contribute to the cumulative effects of habitat loss on these species.

This alternative would not result in impairment of threatened, endangered, or sensitive species.

#### RECREATION RESOURCES

#### Affected Environment.

The Jones Bridge Unit of Chattahoochee River National Recreation Area is open to year-round public use. A range of organized visitor activities, including hiking, wildlife viewing, camping and family events are available at the CREEC.

#### Alternative 1. No Action

If no action is taken, it is likely that the septic system would continue to overflow producing an unsightly safety hazard. When this occurs, access is limited. The park is unable to hold multiple large events in a month because of the antiquated septic system at the CREEC. The public desires more family and other special events. YCC and SCA volunteers, scouts, and teachers in training use these facilities. The park cannot expand these types of activities without connection to the county sewer line. In addition with no access to the park telephone and computer system, communication with staff working at the CREEC is difficult. The effect on planning and implementation of events is adverse, minor, and long term. The effects of this alternative on Recreation Resources are minor, negative, long term and localized.

#### Cumulative effects

Cumulative effects at the CREEC of the no-action alternative would be negative localized, long-term and minor. Since this facility is currently the only place suitable on the park to routinely hold large events a negative long term effect on the use of this unit by visitors is expected.

This alternative would not result in impairment of recreation resources.

## Alternative 2. Connect CREEC to main sewer line and install fiber optic line

Under this alternative the septic system would not overflow or back up into the CREEC. The park would be able to hold several large events a month. The public would have more family and other special events. YCC and SCA volunteers, scouts, and teachers in training could use these facilities without concern for the septic system. This project would be expected to cause an increase in the number of visitors to the CREEC, except during construction. The effects connecting to the Fulton County sewer line on Recreation Resources are minor, positive, long term and localized. Installation of a fiber optic line would facilitate communication with park headquarters for staff working at the CREEC. The effects of this proposed action would be beneficial, minor, and localized.

#### Cumulative Effects

Cumulative effects at the CREEC would be beneficial localized, long-term and minor. Since this facility is currently the only place suitable on the park to routinely hold large events, a long term beneficial effect on the use of this unit by visitors is expected.

This alternative would not result in impairment of recreation resources.

#### **CULTURAL RESOURCES**

#### Affected Environment.

Although this area was used as farmland in the last 150 years, heavy deposition of silt and alluvial deposits in the last 1000 years could have deeply buried archeological sites. No archeological sites were found along the entrance road or on either side (Jordan 2004). Pedestrian surveys in 1980 did not find archeological or historical resources in the area proposed for trenching (O'Grady and Poe 1980). The route currently planned goes along park trails and a road to the Fulton County easement and manhole. Since the proposed trench would be cutting 3 feet or more into the ground, the park had a Phase I archeological survey done by the South East Archeology Center (SEAC) in September 2004 to identify unknown archeological resources. This survey identified a previously unknown site along the proposed path of the sewer line near the manhole. The archeological site was located on either side of the road near the sewer main. Due to inclement weather the exact location of the site was not delineated. Nor was the research value or eligibility of the site determined. Very few artifacts were found suggesting that the proposed route was along an edge of the site. The proposed route would be the best route for the sewer line to take as the roadbed is highly disturbed. The site was not defined due to heavy rains associated with Ivan. An archeologist from SEAC would be present as the trenching approaches the archeological site.

#### Alternative 1. No Action

Under the no-action alternative no adverse effects to cultural resources known or unknown is expected.

#### Cumulative effects

This alternative would not contribute to cumulative loss of cultural resources in the area due to urbanization.

This alternative would not result in impairment of cultural resources.

## .Alternative 2. Connect CREEC to main sewer line and install fiber optic line

Under this alternative no adverse effects to historical resources is likely to occur. An archeological site was located on either side of the road near the sewer main. Due to inclement weather the exact location of the site was not delineated. Nor was the research value or eligibility of the site determined. Very few artifacts were found suggesting that the proposed route was along an edge of the site. The following mitigations would be followed:

- The proposed route shown in Figure 3 must be followed especially near the archeological site;
- an archeologist must be present when the trench approaches the archeological site;
- the trench must be kept to the minimum needed to install the pipe within the site;
- minimum width would be 18 inches;
- Pipe would be preassembled in non sensitive areas and placed into the trench
- the smallest backhoe feasible for use must be used in the area of the site;
- the weight of the backhoe must be distributed on four legs;
- and any other mitigation the Archeological Report on the CREEC Sewer Line Proposed Route lists or the archeologist on site suggest must be followed.

Compliance with Section 106 of the National Historic Preservation Act would require that: No adverse effect to archeological resources eligible for the National Register Of Historic Places is expected if the above mitigations are followed.

#### Cumulative Effects

This alternative would not contribute to cumulative loss of cultural resources in the area due to urbanization.

#### **PREPARERS**

Chattahoochee River Environmental Education Center Sewer and Fiber Optic Connection Proposal was prepared for the National Park Service by Dr. Nina Hemphill of Chattahoochee River National Recreation Area, Division of Science and Resource Management.

## LIST OF PERSONS AND AGENCIES CONSULTED

This environmental assessment (EA) was prepared in consultation and coordination with the following members of the park staff: Charlie Jackson, David Ek, David

Lairson, Richard Lutz, Nancy Poe, and Leroy Stubblefield. This EA will be posted on the Webpage for the Chattahoochee River National Recreation Area (<a href="www.nps.gov/chat/">www.nps.gov/chat/</a>) under Management Docs and will be available at park Headquarters upon request. Notice of the proposed action would be posted in the Jones Bridge Unit and at the CREEC.

Additional consultation has been with the following individuals: Charles Lawson, South Eastern Archeology Center; Cherry Green, Threatened and Endangered Species Coordinator, wetlands specialist SER NPS; Whit Gibbons, Savannah River Ecology Laboratory, herpetogy expert; and Ernest Garcia USDA Forest Service Wildlife Biologist.

The following were sent a copy of the Environmental Assessment:

Jim Allison Georgia Department of Natural Resources Georgia Natural Heritage Program 2117 US Hwy 278 SE Social Circle, Georgia 30025

Sandy Tucker, Field Supervisor U.S. Fish and Wildlife Service 247 South Milledge Ave. Athens, GA 30605

Robin Goodloe U.S. Fish and Wildlife Service 247 South Milledge Ave. Athens, GA 30605

Genie Strickland Georgia Sierra Club 1447 Peachtree Street NE Suite 305 Atlanta, GA 30309-3034

Randy Tate
Director of Science and Stewardship
The Nature Conservancy
1330 West Peachtree St., Ste. 410
Atlanta, GA 30309-2904

Sally Bethea UPPER CHATTAHOOCHEE RIVERKEEPER 3 Puritan Mill 916 Joseph Lowery Blvd. Atlanta, GA 30318

Virginia Dunbar Atlanta Audubon Society Box 29189 Atlanta, Georgia 30359

Carol Helton Atlanta Botanical Garden 1345 Piedmont Ave., NE Atlanta, GA 30309

Section 106 documents have been prepared for the Georgia State SHPO, Ray Luce

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## **FIGURES**

Figure 1. Park Overview

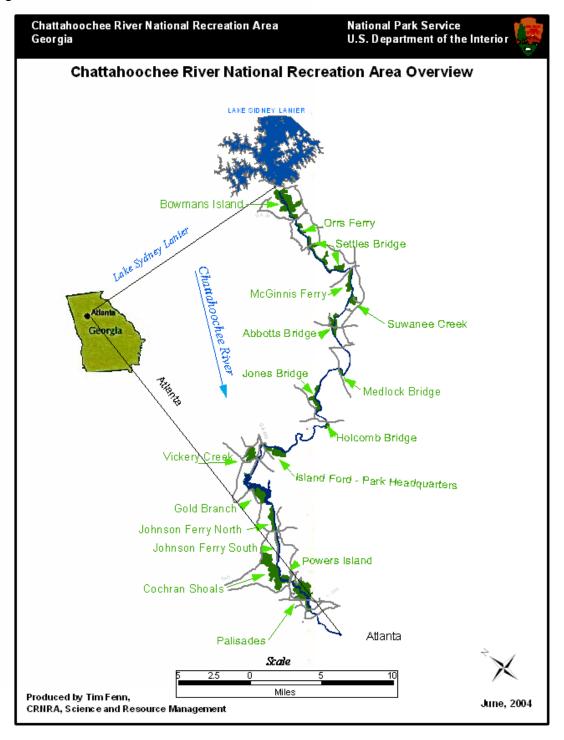
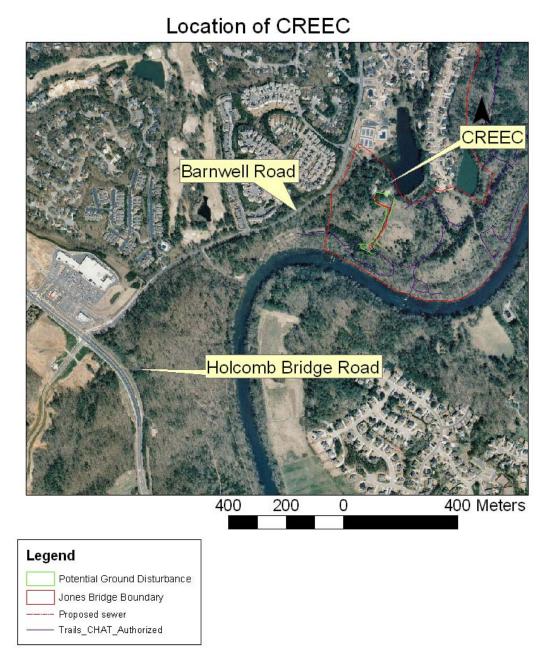
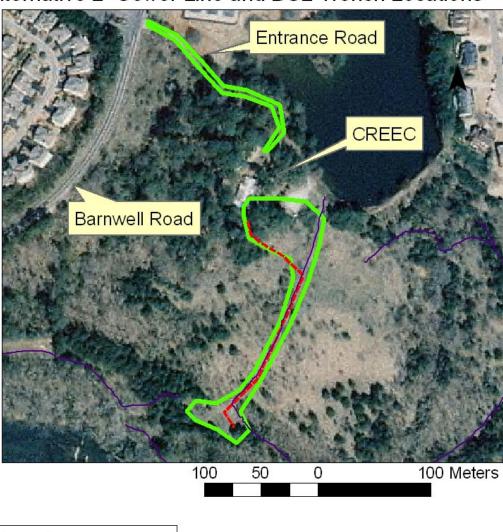


Figure 2: Location of CREEC



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Figure 3: Alternative 2- Proposed sewer line



Alternative 2- Sewer Line and DSL Trench Locations



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